

PARTICLE DISPERSIONS

ABSTRACT OF THE DISCLOSURE

Improved particle dispersions are formed using nanoparticles with average primary particle diameters less than about 100 nm. The collection of nanoparticles in the dispersion have very narrow particle size distributions that do not have tails at larger particle sizes. In particular, the collection of nanoparticles effectively do not have primary particles with a diameter greater than three times the average particle diameter. The improved dispersions can be used in the formation of polishing compositions for chemical-mechanical polishing and in the production of thin coatings.

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